AMENDMENT TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method for producing a bonded wafer, comprising:

~~an epitaxial growth step for~~ growing ~~an~~ a silicon epitaxial layer ~~containing~~ comprising boron having a concentration of $5x10^{18}$ atoms/cm^3 or greater on an active layer silicon wafer ~~in a wafer for active layer~~;

~~an insulating film formation step for~~ forming an insulating film in a surface of said epitaxial layer;

~~an ion implantation step,~~ following said insulating film formation, ~~for~~ ion-implanting ~~of~~ a light element into said epitaxial layer at a predetermined depth to thereby form an ion-implanted area therein;

~~a bonding step,~~ following said ion implantation, ~~for~~ bonding said active layer wafer and a supporting wafer together with said insulating film interposed therebetween to thereby form a bonded wafer; ~~and~~

~~a cleavage and separation step for~~ heat treating said bonded wafer to cause bubbles of light element to be generated in said ion-implanted area and thereby a part of said active layer wafer to be cleaved and separated at the site of said predetermined depth for forming an active layer; and

after said insulating layer formation on said active layer wafer or said cleavage of the part of said active layer wafer, performing an annealing treatment on said active layer wafer or bonded wafer at a temperature of 1,000°C or higher and for a duration of one hour or longer in a reducing gas atmosphere comprising hydrogen gas.

2. (Canceled)

3. (Previously Presented) A method for producing a bonded wafer in accordance with claim 1, in which a thickness of said epitaxial layer is 0.3μm or thicker.

4. (Canceled)

5. (Previously Presented) A method for producing a bonded wafer in accordance with claim 1, in which a thickness of said insulating film is thinner than 0.2μm.

6. (Withdrawn – Currently Amended) A method for producing a bonded wafer, comprising:

an ion-implantation step for ion-implanting [[of]] a light element into a wafer for active layer at a predetermined depth to thereby form an ion-implanted area therein, said active layer wafer comprising an insulating film formed thereon and containing boron at a concentration of $9x10^{18}$ atoms/cm^3 or higher and oxygen at a concentration below $12x10^{17}$ ~~atmos/cm^3~~ atoms/cm^3 (old ASTM);

a bonding step for subsequently bonding said active layer wafer that has been subjected to the ion implantation and a supporting wafer together with said insulating film interposed therebetween to thereby form a bonded wafer; and

a cleavage and separation step for heat treating said bonded wafer to cause bubbles of light element to be generated in said ion-implanted area and thereby a part of said active layer wafer to be cleaved and separated at the site of said predetermined depth for forming an active layer.

7.-11. (Canceled)

12. (Previously Presented) A method for producing a bonded wafer in accordance with claim 3, in which a thickness of said insulating film is thinner than 0.2μm.

13.-17. (Canceled).

18. (Withdrawn) A method for producing a bonded wafer in accordance with claim 6, in which an annealing process is applied to said active layer wafer or said bonded wafer at 1000°C or a higher temperature for one hour or more in a reducing gas atmosphere containing hydrogen gas after said formation of said insulating film in said active layer wafer or said cleavage and separation of said active layer wafer.